

Set	Items	Description
-----		
? e au=krieg, ar?		

Ref	Items	Index-term
E1	1	AU=KRI EG. ANDREAS H.
E2	1	AU=KRI EG. ANJA
E3	0	*AU=KRI EG. AR?
E4	1	AU=KRI EG. ARI BERT
E5	7	AU=KRI EG. ARTHUR
E6	1	AU=KRI EG. ARTHUR F.
E7	11	AU=KRI EG. ARTHUR F.
E8	64	AU=KRI EG. ARTHUR M.
E9	251	AU=KRI EG. ARTHUR M.
E10	2	AU=KRI EG. B.
E11	249	AU=KRI EG. B.
E12	4	AU=KRI EG. B. L.

Enter P or PAGE for more

? s e1-e12	1	AU=KRI EG. ANDREAS H.
	1	AU=KRI EG. ANJA
	0	AU=KRI EG. AR?
	1	AU=KRI EG. ARI BERT
	7	AU=KRI EG. ARTHUR
	1	AU=KRI EG. ARTHUR F.
	11	AU=KRI EG. ARTHUR F.
	64	AU=KRI EG. ARTHUR M.
	251	AU=KRI EG. ARTHUR M.
	2	AU=KRI EG. B.
	249	AU=KRI EG. B.
	4	AU=KRI EG. B. L.
S1	592	E1-E12
? s s1 and tgcgtcggttttgacgttttgctggt	592	S1
	2	TGTCGTTTTGAAGTTTTGTGTT
S2	0	S1 AND TGTCGTTTTGAAGTTTTGTGTT
? s s1 and phosphodi ester	592	S1
	37178	PHOSPHODI ESTER
S3	13	S1 AND PHOSPHODI ESTER
? rd		

&gt;&gt;&gt;Duplicate detection is not supported for File 393.

&gt;&gt;&gt;Duplicate detection is not supported for File 391.

&gt;&gt;&gt;Records from unsupported files will be retained in the RD set.

S4 11 RD (unique items)

&gt; t s4/3, k/1-11

&gt;&gt;&gt;KWC option is not available in file(s): 399

4/3, K/1 (Item 1 from file: 98)

DI ALCO (R) File 98: General Sci Abs

(c) 2009 The HW Wilson Co. All rts. reserv.

02515609 H. W. WILSON RECORD NUMBER: BGS193015609

Modification of antisense phosphodiester oligodeoxynucleotides by a 5' cholesterol moiety increases cellular association and improves efficacy.

Krieg, Arthur M.  
Tonkinson, John; Matson, Sara

10644052cpgA.txt  
 Proceedings of the National Academy of Sciences of the United States of America (Proc Natl Acad Sci U S A) v. 90 (Feb. 1 '93) p. 1048-52  
 SPECIAL FEATURES: bibli ISSN: 0027-8424  
 LANGUAGE: English  
 COUNTRY OF PUBLICATION: United States

Modification of antisense phosphodiester oligodeoxynucleotides by a 5' cholesterol moiety increases cellular association and improves efficacy.  
 Krieg, Arthur M

4/3, K/2 (Item 1 from file: 399)  
 DI ALOC R) File 399: CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rts. reserv.

150258230 CA: 150(13)258230u PATENT  
 Combination motif immune stimulatory oligonucleotides with improved activity  
 INVENTOR(AUTHOR): Uhlmann, Eugen; Krieg, Arthur M; Hanson, Douglas Charles; Samulowitz, Ulrike  
 LOCATION: USA  
 ASSIGNEE: Pfizer Inc.; Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH  
 PATENT: PCT International; WO 200922215 A1 DATE: 20090219  
 APPLICATION: WO 2008182102 (20080805) \*US 2007PV964477 (20070813)  
 PAGES: 73pp. CODEN: PIXXD2 LANGUAGE: English  
 PATENT CLASSIFICATIONS:  
 IPC/8 + Level Value Position Status Version Action Source Office:  
 A61K-0031/7088 A I F B 20060101 H EP  
 C12N-0015/11 A I L B 20060101 H EP  
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AQ; AT; AU; AZ; BA; BB; BG; BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EE; EG; ES; FI; GB; GD; GE; GH; GM; GT; HN; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU; LY; MA; MD; ME; MG; MK; MN; MW; MX; MY; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS; RU; SC; SD; SE; SG; SK; SL; SM; ST; SV; SY; TJ; TM; TN; TR DESIGNATED REGIONAL: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HR; HU; IE; IS; IT; LT; LU; LV; MC; MT; NL; NO; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

4/3, K/3 (Item 2 from file: 399)  
 DI ALOC R) File 399: CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rts. reserv.

145291047 CA: 145(15)291047 PATENT  
 Immunostimulatory oligonucleotides with stabilized internucleotide linkage for treating cancer, allergy, asthma and infection  
 INVENTOR(AUTHOR): Krieg, Arthur M; Samulowitz, Ulrike; Vollmer, Joerg  
 LOCATION: USA  
 ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH  
 PATENT: PCT International; WO 200691915 A2 DATE: 20060831  
 APPLICATION: WO 2006US6778 (20060224) \*US 2005PV655931 (20050224)  
 PAGES: 93pp. CODEN: PIXXD2 LANGUAGE: English  
 PATENT CLASSIFICATIONS:  
 CLASS: A61K-000/A  
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; LY; MA; MD; ME; MG; MK; MN; MW; MX; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SM; SY; TJ; TM; TN; TR;

10644052cpgA.txt  
 TT: TZ: UA: UG: US: UZ: VC: VN: YU: ZA DESIGNATED REGIONAL: AT: BE: BG: CH  
 : CY: CZ: DE: DK: EE: ES: FI: FR: GB: GR: HU: IE: IS: IT: LT: LU: LV: MC:  
 NL: PL: PT: RO: SE: SI: SK: TR: BF: BJ: CF: CG: CI: OM: GA: GN: GQ: GW: ML:  
 MR: NE: SN: TD: TG: BW: GH: GM: KE: LS: MW: MZ: NA: SD: SL: SZ: TZ: UG: ZM:  
 ZW AM AZ: BY: KG: KZ: MD: RU: TJ: TM

4/3, K/4 (Item 3 from file: 399)  
 DIALOQ(R) File 399: CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rts. reserv.

142462266 CA: 142(25)462266z PATENT  
 CpG immunostimulatory nucleic acids and oligonucleotide analogs for  
 enhancing immune response of vaccines against infection, allergy and  
 cancer  
 INVENTOR(AUTHOR): Uhlmann, Eugen; Vollmer, Joerg; Krieg, Arthur M; Noll,  
 Bernhard O  
 LOCATIONS: Germany,  
 ASSIGNEE: Coley Pharmaceutical G.m.b.H.; Coley Pharmaceutical Group, Inc.  
 PATENT: PCT International ; WO 200542018 A2 DATE: 20050512  
 APPLICATION: WO 2004US36240 (20041029) \*US 2003PV516193 (20031030)  
 PAGES: 113 pp. CODEN: PIXXD2 LANGUAGE: English  
 PATENT CLASSIFICATIONS:  
 CLASS: A61K-039/39A; A61P-031/00B; A61P-037/08B; A61P-035/00B  
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;  
 BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;  
 GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS;  
 LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;  
 PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US;  
 UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ  
 : NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;  
 BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;  
 PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; OM; GA; GN; GQ; GW; ML; MR;  
 NE; SN; TD; TG

4/3, K/5 (Item 4 from file: 399)  
 DIALOQ(R) File 399: CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rts. reserv.

142372464 CA: 142(20)372464h PATENT  
 Compositions comprising immunostimulatory nucleic acid-lipophilic  
 conjugates and antigen or therapeutic agent for treating allergy, cancer,  
 infection and autoimmune disease  
 INVENTOR(AUTHOR): Vollmer, Joerg; Krieg, Arthur M; Uhlmann, Eugen  
 LOCATIONS: USA  
 ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH  
 PATENT: PCT International ; WO 200530259 A2 DATE: 20050407  
 APPLICATION: WO 2004US31748 (20040927) \*US 2003PV505977 (20030925)  
 PAGES: 120 pp. CODEN: PIXXD2 LANGUAGE: English  
 PATENT CLASSIFICATIONS:  
 CLASS: A61K-047/48A  
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;  
 BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;  
 GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS;  
 LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;  
 PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US;  
 UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ  
 : NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;  
 BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;  
 PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; OM; GA; GN; GQ; GW; ML; MR;  
 NE; SN; TD; TG

4/3, K/6 (Item 5 from file: 399)

DI ALCOG R) File 399: CA SEARCH R)

(c) 2009 American Chemical Society. All rts. reserv.

140230578 CA: 140(15)230578h PATENT

Sequences of immunostimulatory oligonucleotides and therapeutic use for immune related diseases

INVENTOR(AUTHOR): Krieg, Arthur M.; Samulowitz, Ulrike; Vollmer, Joerg; Uhlmann, Eugen; Jurk, Marion; Lipford, Grayson; Rankin, Robert

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GrbH

PATENT: PCT International ; WO 200416805 A2 DATE: 20040226

APPLICATION: WO 2003US25935 (20030819) \*US PV404479 (20020819) \*US

PV404820 (20020819) \*US PV429701 (20021127) \*US PV447377 (20030214)

PAGES: 276 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: C12Q 000/ A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

4/3, K/7 (Item 6 from file: 399)

DI ALCOG R) File 399: CA SEARCH R)

(c) 2009 American Chemical Society. All rts. reserv.

138203655 CA: 138(14)203655h PATENT

Oligonucleotides containing stimulatory phosphorothioate motif and neutralizing motif for treating infections, allergies and cancers

INVENTOR(AUTHOR): Krieg, Arthur M.; Vollmer, Joerg; Uhlmann, Eugen

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH ; University of Iowa Research Foundation

PATENT: PCT International ; WO 200315711 A2 DATE: 20030227

APPLICATION: WO 2002US26468 (20020819) \*US PV313273 (20010817) \*US

PV393952 (20020703)

PAGES: 115 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: A61K 000/ A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

4/3, K/8 (Item 7 from file: 399)

DI ALCOG R) File 399: CA SEARCH R)

(c) 2009 American Chemical Society. All rts. reserv.

135018544 CA: 135(2)18544w PATENT

Immunostimulatory nucleic acid molecules

10644052cpgA.txt

INVENTOR(AUTHOR): Krieg, Arthur M.; Kline, Joel N.  
LOCATION: USA  
ASSIGNEE: University of Iowa Research Foundation; Coley Pharmaceutical Group, Inc.; United States Dept. of Health and Human Services  
PATENT: United States; US 6239116 B1 DATE: 20010529  
APPLICATION: US 960774 (19971030) \*US 738652 (19961030)  
PAGES: 74 pp., Cont.-in-part of U.S. Ser. No. 738,652. CODEN: USXXAM  
LANGUAGE: English  
PATENT CLASSIFICATIONS:  
CLASS: 514044000; A61P-037/06A

4/3, K/9 (Item 8 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

133349133 CA: 133(25)349133e PATENT  
Screening for immunostimulatory DNA functional modifiers  
INVENTOR(AUTHOR): Noll, Bernhard G.; Schetter, Christian; Krieg, Arthur M.  
LOCATION: Germany.  
ASSIGNEE: CPG Immunopharmaceuticals Gmb.H.; University of Iowa Research Foundation  
PATENT: PCT International; WO 200067023 A1 DATE: 20001109  
APPLICATION: WO 2000US11697 (20000428) \*US PV131830 (19990429) \*US  
PV186845 (20000303)  
PAGES: 95 pp. CODEN: P1XXD2 LANGUAGE: English  
PATENT CLASSIFICATIONS:  
CLASS: G01N-033/50A; G01N-033/68B; C12Q-001/68B; C07K-014/47B  
DESIGNATED COUNTRIES: AE; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; CA; CH;  
CN; CR; CU; CZ; DE; DK; DM; DZ; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID;  
IL; IN; IS; JP; KE; KG; KP; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG;  
MK; MN; MW; MX; NO; NZ; PL; PT; RO; RU; SD; SE; SG; SI; SK; SL; TJ; TM; TR;  
TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM  
DESIGNATED REGIONAL: GH; GM; KE; LS; MW; SD; SL; SZ; TZ; UG; ZW AT; BE;  
CH; CY; DE; DK; ES; FI; FR; GB; GR; IE; IT; LU; MC; NL; PT; SE; BF; BJ; CF;  
CG; CI; CM; GA; GN; GW; ML; MR; NE; SN; TD; TG

4/3, K/10 (Item 9 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

123274918 CA: 123(21)274918x CONFERENCE PROCEEDING  
Uptake and localization of phosphodiester and chimeric  
oligodeoxynucleotides in normal and leukemic primary cells  
AUTHOR(S): Krieg, Arthur M.  
LOCATION: Department Internal Medicine, University Iowa, Iowa, IA, USA  
JOURNAL: Delivery Strategies Antisense Oligonucleotide Ther. EDITOR:  
Akhtar, Saghir (Ed), DATE: 1995 PAGES: 177-90 CODEN: 61RXAX LANGUAGE:  
English PUBLISHER: CRC, Boca Raton, Fla

4/3, K/11 (Item 10 from file: 399)

DIALOG(R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

119173523 CA: 119(17)173523b JOURNAL  
Comparison of cellular binding and uptake of antisense phosphodiester,  
phosphorothioate, and mixed phosphorothioate and methylphosphonate  
oligonucleotides  
AUTHOR(S): Zhao, Qiyuan; Matson, Sara; Herrera, Charles J.; Fisher, Eric;  
Yu, Hong; Krieg, Arthur M.  
LOCATION: Coll. Med., Univ. Iowa, Iowa City, IA, USA  
Page 5

JOURNAL: Antisense Res. Dev. DATE: 1993 VOLUME: 3 NUMBER: 1 PAGES:  
 53-66 CODEN: AREDEI ISSN: 1050-5261 LANGUAGE: English  
 ? ds

Set	Items	Description
S1	592	E1- E12
S2	0	S1 AND TCGTCGTTTTGACGTTTTGTCGTT
S3	13	S1 AND PHOSPHODI ESTER
S4	11	RD (unique items)

? e au=samul owitz, urike?

Ref	Items	Index-term
E1	4	AU=SAMULOW TZ, U
E2	25	AU=SAMULOW TZ, ULRI KE
E3	0	*AU=SAMULOW TZ, URI KE?
E4	1	AU=SAMULOWSKA, BARBARA
E5	2	AU=SAMULOWSKI, W
E6	1	AU=SAMULS S
E7	1	AU=SAMULSEN, DM
E8	3	AU=SAMULSKA EWA
E9	2	AU=SAMULSKA H
E10	2	AU=SAMULSKA H M
E11	2	AU=SAMULSKA HANNA
E12	2	AU=SAMULSKA J

Enter P or PAGE for more  
 ? e au=samul owitz, ulrik?

Ref	Items	Index-term
E1	1	AU=SAMULOW TZ, M CHAEL
E2	4	AU=SAMULOW TZ, U
E3	0	*AU=SAMULOW TZ, ULRI K?
E4	25	AU=SAMULOW TZ, ULRI KE
E5	1	AU=SAMULOWSKA, BARBARA
E6	2	AU=SAMULOWSKI, W
E7	1	AU=SAMULS S
E8	1	AU=SAMULSEN, DM
E9	3	AU=SAMULSKA EWA
E10	2	AU=SAMULSKA H
E11	2	AU=SAMULSKA H M
E12	2	AU=SAMULSKA HANNA

Enter P or PAGE for more  
 ?  
 ? s e4  
     S5       25 AU= SAMULOW TZ, ULRI KE  
 ? s s5 and phosphodi ester  
     25       S5  
     37178   PHOSPHODI ESTER  
     S6       3   S5 AND PHOSPHODI ESTER  
 ? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.  
     S7       3   RD (unique items)

? t s7/3, k/1-3

>>>KW C option is not available in file(s): 399

7/3, K/1       (Item 1 from file: 399)  
 DI ALCOG R) File 399: CA SEARCH(R)

10644052cpgA.txt

(c) 2009 American Chemical Society. All rts. reserv.

150258230 CA: 150(13)258230u PATENT

Combination motif immune stimulatory oligonucleotides with improved activity

INVENTOR(AUTHOR): Uhlmann, Eugen; Krieg, Arthur M; Hanson, Douglas Charles; Samulowitz, Ulrike

LOCATION: USA

ASSIGNEE: Pfizer Inc.; Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH

PATENT: PCT International; WO 200922215 A1 DATE: 20090219

APPLICATION: WO 20081 B2102 (20080805) \*US 2007PV964477 (20070813)

PAGES: 73pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

IPC/8 + Level Value Position Status Version Action Source Office:

A61K-0031/7088 A I F B 20060101 H EP

G12N-0015/11 A I L B 20060101 H EP

DESIGNATED COUNTRIES: AE; AG; AL; AM; AO; AT; AU; AZ; BA; BB; BG; BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; GT; HN; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU; LY; MA; MD; ME; MG; MK; MN; MW; MX; MY; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS; RU; SC; SD; SE; SG; SK; SL; SM; ST; SV; SY; TJ; TM; TN; TR DESIGNATED REGIONAL: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HR; HU; IE; IS; IT; LT; LU; LV; MC; MT; NL; NO; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

7/3, K/2 (Item 2 from file: 399)

DIALOGR File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

145291047 CA: 145(15)291047j PATENT

Immunostimulatory oligonucleotides with stabilized internucleotide linkage for treating cancer, allergy, asthma and infection

INVENTOR(AUTHOR): Krieg, Arthur M; Samulowitz, Ulrike; Vollmer, Joerg

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH

PATENT: PCT International; WO 200691915 A2 DATE: 20060831

APPLICATION: WO 2006US6778 (20060224) \*US 2005PV655931 (20050224)

PAGES: 93pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATIONS:

CLASS: A61K-000/A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; LY; MA; MD; MG; MK; MN; MW; MX; MY; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SM; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ; VC; VN; YU; ZA DESIGNATED REGIONAL: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LT; LU; LV; MC; NL; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

7/3, K/3 (Item 3 from file: 399)

DIALOGR File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

140230578 CA: 140(15)230578h PATENT

Sequences of immunostimulatory oligonucleotides and therapeutic use for immune related diseases

10644052cpgA.txt

INVENTOR(AUTHOR): Krieg, Arthur M.; Samulowitz, Ulrike; Vollmer, Joerg;  
Uhlmann, Eugen; Jurk, Marion; Lipford, Grayson; Rankin, Robert  
LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GrbH

PATENT: PCT International ; WO 200416805 A2 DATE: 20040226

APPLICATION: WO 2003US25935 (20030819) \*US PV404479 (20020819) \*US

PV404820 (20020819) \*US PV429701 (20021127) \*US PV447377 (20030214)

PAGES: 276 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: C12Q 000/ A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU;  
SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU;  
ZA; ZW AM AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE  
; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW AT; BE; BG; CH; CY; CZ; DE; DK;  
EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF;  
BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG  
? e au=vollmer, j?

Ref	Items	Index-term
E1	1	AU=VOLLMER, J*
E2	1	AU=VOLLMER, J-Y
E3	0	*AU=VOLLMER, J?
E4	1	AU=VOLLMER, JAMES
E5	6	AU=VOLLMER, JAMES M
E6	16	AU=VOLLMER, JAMES M
E7	2	AU=VOLLMER, JAMES M CHAEL
E8	1	AU=VOLLMER, JANI CE
E9	1	AU=VOLLMER, JANS JUERGEN
E10	2	AU=VOLLMER, JASON
E11	1	AU=VOLLMER, JEAN P.
E12	3	AU=VOLLMER, JEAN PIERRE

Enter P or PAGE for more

? e au=vollmer, jorg

Ref	Items	Index-term
E1	1	AU=VOLLMER, JOHN JOCHEN
E2	8	AU=VOLLMER, JOHN W
E3	24	*AU=VOLLMER, JORG
E4	1	AU=VOLLMER, JORG HEI NZ
E5	1	AU=VOLLMER, JOSEPH
E6	2	AU=VOLLMER, JOSEPH G
E7	2	AU=VOLLMER, JOSEPH GERARD
E8	1	AU=VOLLMER, JOSEPH H.
E9	1	AU=VOLLMER, JOSEPH HARRY
E10	3	AU=VOLLMER, JR., H. D.
E11	3	AU=VOLLMER, JUDITH
E12	15	AU=VOLLMER, JUERGEN

Enter P or PAGE for more

? s e3-e4

24	AU=VOLLMER, JORG
1	AU=VOLLMER, JORG HEI NZ

S8 25 E3-E4

? s s8 and phosphodi ester

25	S8
37178	PHOSPHODI ESTER

S9 1 S8 AND PHOSPHODI ESTER

? rd



>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S10 1 RD (unique items)

? t s10/3,k/1

>>>KWC option is not available in file(s): 399

10/3,K/1 (Item 1 from file: 399)

DI ALCOG R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

138203655 CA: 138(14)203655h PATENT

Oligonucleotides containing stimulatory phosphorothioate motif and neutralizing motif for treating infections, allergies and cancers

INVENTOR(AUTHOR): Krieg, Arthur M; Vollmer, Jorg; Uhlman, Eugen

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical Gmb.H  
; University of Iowa Research Foundation

PATENT: PCT International ; WO 200315711 A2 DATE: 20030227

APPLICATI ON: WO 2002US26468 (20020819) \*US PV313273 (20010817) \*US

PV393952 (20020703)

PAGES: 115 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFI CATIONS:

CLASS: A61K 000/ A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
GM; GR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
LV; MA; MD; MG; MK; MN; MW; MX; ME; NO; NZ; OM; PH; PL; PT; RO; RU; SD; SE;  
SG; SI; SK; SL; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VN; YU; ZA; ZW; AM; AZ;  
BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE; LS; MW; MZ; SD  
; SL; SZ; TZ; UG; ZM; ZW AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR;  
GB; GR; IE; IT; LU; MC; NL; PT; SE; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN;  
GQ; GW; ML; MR; NE; SN; TD; TG  
? e au=uhlmann, eugen?

Ref	Items	Index-term
E1	565	AU=UHLMANN, EUGEN
E2	2	AU=UHLMANN, EUGEN DR
E3	0	*AU=UHLMANN, EUGEN?
E4	1	AU=UHLMANN, EUGENE
E5	3	AU=UHLMANN, EUGENI E V
E6	8	AU=UHLMANN, EUGENI E V.
E7	2	AU=UHLMANN, EUGENI E VI CTORIA
E8	32	AU=UHLMANN, F
E9	8	AU=UHLMANN, F H
E10	2	AU=UHLMANN, F HERMANN
E11	114	AU=UHLMANN, F.
E12	3	AU=UHLMANN, F. H

Enter P or PAGE for more

? s e1-e3

565 AU=UHLMANN, EUGEN  
2 AU=UHLMANN, EUGEN DR  
0 AU=UHLMANN, EUGEN?

S11

567 E1-E3

? s s11 and phosphodiester

567 S11

37178 PHOSPHODI ESTER

S12

8 S11 AND PHOSPHODI ESTER

? rd

10644052cpgA.txt

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S13 8 RD (unique items)

? t s13/3, k/1-8

>>>KWC option is not available in file(s): 399

13/3, K/1 (Item 1 from file: 393)

DI ALCOG R) File 393: Beilstein Database - Abstracts

(c) 2008 Beilstein GmbH. All rights reserved.

Beilstein Abstract Id: 6219964

Title: Influence of the Type of Junction in DNA-3'-Peptide Nucleic Acid (PNA) Chimeras on Their Binding Affinity to DNA and RNA

Document Type: Journal Record Type: Abstract

Author: Greiner, Beate; Breipohl, Gerhard; Uhlmann, Eugen

Citation: Helv. Chim. Acta (1999) Series: 82-12, 2151 - 2159 CODEN: HCACAV

Language: English

Abstract Language: English

Author: Greiner, Beate; Breipohl, Gerhard; Uhlmann, Eugen

...Abstract: duplex stabilization was determined to be in the order Q > S > ca. NH<sub>2</sub> reordering the phosphodiester bridge the most favored linkage at the DNA/PNA junction. The observed strong duplex-destabilizing...

13/3, K/2 (Item 2 from file: 393)

DI ALCOG R) File 393: Beilstein Database - Abstracts

(c) 2008 Beilstein GmbH. All rights reserved.

Beilstein Abstract Id: 5780737

Title: Nucleotide. XV. Synthese und Eigenschaften von 2'-O-t-Butyldiethylsilyl-5'-O-monomethoxytritylribonucleosid-3'-phosphodiestern, Ausgangssubstanzen fuer Oligonucleotid-Synthesen

Document Type: Journal Record Type: Abstract

Author: Silber, Gunter; Flockerzi, Dieter; Varma, Rajendra Singh; Charubala, Ramamurthy; Uhlmann, Eugen; Pfeleiderer, Wolfgang

Citation: Helv. Chim. Acta (1981) Series: 64-5, 1704-1716 CODEN: HCACAV

Language: German

Abstract Language: English

Author: Silber, Gunter; Flockerzi, Dieter; Varma, Rajendra Singh; Charubala, Ramamurthy; Uhlmann, Eugen; Pfeleiderer, Wolfgang

...Abstract: 15-23 with free HO-C(5') could be obtained by detritylation and the 3'-phosphodiester triethylammonium salts 24-32 by deblocking of the cyanoethyl and the 2,5-dichlorophenyl group...

13/3, K/3 (Item 1 from file: 399)

DI ALCOG R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

150258230 CA: 150(13)258230u PATENT

Combination motif immune stimulatory oligonucleotides with improved activity

INVENTOR(AUTHOR): Uhlmann, Eugen; Krieg, Arthur M.; Hanson, Douglas

Charles; Samulowitz, Ulrike

LOCATI ON: USA

ASSIGNEE: Pfizer Inc.; Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH

PATENT: PCT International ; WO 200922215 A1 DATE: 20090219

APPLICATI ON: WO 20081 B2102 (20080805) \*US 2007PV964477 (20070813)

PAGES: 73pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFI CATI ONS:

IPC/8 + Level Value Position Status Version Action Source Office:

A61K-0031/7088 A I F B 20060101 H EP

C12N-0015/11 A I L B 20060101 H EP

DESIGNATED COUNTRIES: AE; AG; AL; AM; AO; AT; AU; AZ; BA; BB; BG; BH; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; GT; HN; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU; LY; MA; MD; ME; MG; MK; MN; MW; MX; MY; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS; RU; SC; SD; SE; SG; SK; SL; SM; ST; SV; SY; TJ; TM; TN; TR DESIGNATED REGIONAL: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HR; HU; IE; IS; IT; LT; LU; LV; MC; ML; NL; NO; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

13/3, K/4 (Item 2 from file: 399)

DI ALCOG R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

150001273 CA: 150(1)1273u PATENT

PCR sequences of oligoribonucleotides for disease treatment

INVENTOR(AUTHOR): Vollmer, Joerg; Uhlmann, Eugen

LOCATI ON: Germany,

ASSIGNEE: Coley Pharmaceutical GmbH

PATENT: PCT International ; WO 2008139262 A2 DATE: 20081120

APPLICATI ON: WO 20071 B4593 (20071026) \*US 2006PV854585 (20061026)

PAGES: 110pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFI CATI ONS:

IPC/8 + Level Value Position Status Version Action Source Office:

C12N-0015/11 A I F B 20060101 H EP

A61K-0031/7088 A I L B 20060101 H EP

C07H-0021/02 A I L B 20060101 H EP

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BH; BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DO; DZ; EC; EE; EG; ES; FI; GB; GD; GE; GH; GM; GT; HN; HR; HU; ID; IL; IN; IS; JP; KE; KG; KM; KN; KP; KR; KZ; LA; LC; LK; LR; LS; LT; LU; LY; MA; MD; ME; MG; MK; MN; MW; MX; MY; MZ; NA; NG; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RS; RU; SC; SD; SE; SG; SK; SL; SM; SV; SY; TJ; TM; TN; TR; TZ DESIGNATED REGIONAL: AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IS; IT; LT; LU; LV; MC; ML; NL; NO; PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG; BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL; SZ; TZ; UG; ZM; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM

13/3, K/5 (Item 3 from file: 399)

DI ALCOG R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rts. reserv.

142462266 CA: 142(25)462266z PATENT

Oligonucleotide analogs for enhancing immune response of vaccines against infection, allergy and cancer

INVENTOR(AUTHOR): Uhlmann, Eugen; Vollmer, Joerg; Krieg, Arthur M; Noll, Bernhard O

LOCATI ON: Germany,

10644052cpgA.txt

ASSIGNEE: Coley Pharmaceutical GmbH; Coley Pharmaceutical Group, Inc.

PATENT: PCT International; WO 200542018 A2 DATE: 20050512

APPLICANT: WO 2004US36240 (20041029) \*US 2003PV516193 (20031030)

PAGES: 113 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: A61K-039/39A; A61P-031/00B; A61P-037/08B; A61P-035/00B

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;  
BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;  
GE; GH; GM; GR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LR; LS;  
LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TZ; UA; UG; US;  
UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ;  
NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;  
BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;  
PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR;  
NE; SN; TD; TG

13/3, K/6 (Item 4 from file: 399)

DI ALCOG(R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

142372464 CA: 142(20)372464h PATENT

Compositions comprising immunostimulatory nucleic acid-lipophilic  
conjugates and antigen or therapeutic agent for treating allergy, cancer,  
infection and autoimmune disease

INVENTOR(AUTHOR): Vollmer, Joerg; Krieg, Arthur M.; Uhlmann, Eugen

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH

PATENT: PCT International; WO 200530259 A2 DATE: 20050407

APPLICANT: WO 2004US31748 (20040927) \*US 2003PV505977 (20030925)

PAGES: 120 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: A61K-047/48A

DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BW; BY;  
BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI; GB; GD;  
GE; GH; GM; GR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LR; LS;  
LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;  
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TZ; UA; UG; US;  
UZ; VC; VN; YU; ZA; ZM; ZW DESIGNATED REGIONAL: BW; GH; GM; KE; LS; MW; MZ;  
NA; SD; SL; SZ; TZ; UG; ZM; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; AT;  
BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;  
PL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR;  
NE; SN; TD; TG

13/3, K/7 (Item 5 from file: 399)

DI ALCOG(R) File 399: CA SEARCH(R)

(c) 2009 American Chemical Society. All rights reserved.

140230578 CA: 140(15)230578h PATENT

Sequences of immunostimulatory oligonucleotides and therapeutic use for  
immune related diseases

INVENTOR(AUTHOR): Krieg, Arthur M.; Samulowitz, Ulrike; Vollmer, Joerg;  
Uhlmann, Eugen; Jurk, Marion; Lipford, Grayson; Rankin, Robert

LOCATION: USA

ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH

PATENT: PCT International; WO 200416805 A2 DATE: 20040226

APPLICANT: WO 2003US25935 (20030819) \*US PV404479 (20020819) \*US  
PV404820 (20020819) \*US PV429701 (20021127) \*US PV447377 (20030214)

PAGES: 276 pp. CODEN: PIXXD2 LANGUAGE: English

PATENT CLASSIFICATION:

CLASS: C12Q-000/A

10644052cpgA.txt

DESI GNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
 CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
 GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
 LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU;  
 SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU;  
 ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM; DESI GNATED REGI ONAL: GH; GM; KE;  
 LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW; AT; BE; BG; CH; CY; CZ; DE; DK;  
 EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF;  
 BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG

13/3, K/8 (Item 6 from file: 399)  
 DI ALCG R) File 399: CA SEARCH(R)  
 (c) 2009 American Chemical Society. All rts. reserv.

93114908 CA: 93(11)114908c JOURNAL  
 New improvements in oligonucleotide synthesis by use of the  
 p-nitrophenylethyl phosphate blocking group and its deprotection by DBU  
 or DBN  
 AUTHOR(S): Uhlmann, Eugen; Pfeleiderer, Wolfgang  
 LOCATION: Fac. Chem., Univ. Konstanz, D-7750, Konstanz, Fed. Rep. Ger.  
 JOURNAL: Tetrahedron Lett. DATE: 1980 VOLUME: 21 NUMBER: 13 PAGES:  
 1181-4 CODEN: TELEAY ISSN: 0040-4039 LANGUAGE: English  
 ? e au=lipford, gr?

Ref	Items	Index-term
E1	44	AU=LI PFORD, GB
E2	3	AU=LI PFORD, GB*
E3	0	*AU=LI PFORD, GR?
E4	22	AU=LI PFORD, GRAYSON
E5	8	AU=LI PFORD, GRAYSON B
E6	63	AU=LI PFORD, GRAYSON B.
E7	2	AU=LI PFORD, GRAYSON BERNARD
E8	2	AU=LI PFORD, HEATHER
E9	1	AU=LI PFORD, HEATHER RI CHTER
E10	3	AU=LI PFORD, J
E11	3	AU=LI PFORD, J.
E12	11	AU=LI PFORD, J. R.

Enter P or PAGE for more

? s e1-e6

44	AU=LI PFORD, GB
3	AU=LI PFORD, GB*
0	AU=LI PFORD, GR?
22	AU=LI PFORD, GRAYSON
8	AU=LI PFORD, GRAYSON B
63	AU=LI PFORD, GRAYSON B.

S14 140 E1-E6

? s s14 and phosphodiester

140 S14  
 37178 PHOSPHODI ESTER

S15 2 S14 AND PHOSPHODI ESTER

? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S16 2 RD (unique items)

? t s16/3, k/1-2

>>>KWC option is not available in file(s): 399

10644052cpgA.txt  
16/3, K/1 (Item 1 from file: 24)  
DIALOG(R) File 24: CSA Life Sciences Abstracts  
(c) 2009 CSA. All rts. reserv.

0002855016 IP ACCESSION NO: 6931820  
Toll-like receptor 9 binds single-stranded CpG-DNA in a sequence- and pH-dependent manner

Rutz, Mark; Metzger, Jochen; Gellert, Tanja; Lippa, Peter; Lipford, Grayson B; Vægner, Hermann; Bauer, Stefan  
Institute for Medical Microbiology, Hygiene and Immunology, Munich, Germany, [mailto:stefan.bauer@rz.tum.de]

European Journal of Immunology, v 34, n 9, p 2541-2550, 2004  
PUBLICATION DATE: 2004

PUBLISHER: Wiley-VCH, Postfach 101161 Weinheim 69451 Germany,  
[mailto:info@wiley-vch.de], [URL: http://www.wiley-vch.de/publish/en/]

DOCUMENT TYPE: Journal Article  
RECORD TYPE: Abstract  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
ISSN: 0014-2980  
FILE SEGMENT: Immunology Abstracts  
Rutz, Mark; Metzger, Jochen; Gellert, Tanja; Lippa, Peter; Lipford, Grayson B; Vægner, Hermann; Bauer, Stefan

#### ABSTRACT:

... that TLR9 binds directly and sequence-specifically to single-stranded unmethylated CpG-DNA containing a phosphodiester backbone.  
TLR9-CpG-DNA interaction occurs at the acidic pH (6.5-5.0) found...

16/3, K/2 (Item 1 from file: 399)  
DIALOG(R) File 399: CA SEARCH(R)  
(c) 2009 American Chemical Society. All rts. reserv.

140230578 CA: 140(15)230578h PATENT  
Sequences of immunostimulatory oligonucleotides and therapeutic use for immune related diseases  
INVENTOR(AUTHOR): Krieg, Arthur M; Samulowitz, Ulrike; Vollmer, Joerg; Uhlmann, Eugen; Jurk, Marion; Lipford, Grayson; Rankin, Robert  
LOCATION: USA  
ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GmbH  
PATENT: PCT International; WO 200416805 A2 DATE: 20040226  
APPLICATION: WO 2003US25935 (20030819) \*US PV404479 (20020819) \*US PV404820 (20020819) \*US PV429701 (20021127) \*US PV447377 (20030214)  
PAGES: 276 pp. CODEN: PXXXX2 LANGUAGE: English  
PATENT CLASSIFICATION:  
CLASS: C12Q 000/A  
DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ; CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH; GM; HR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU; LV; MA; MD; MG; MK; MN; MW; MX; MZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU; SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YE; ZA; ZW; AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GT; GM; KE; ; LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG  
? e au=rankin, rob?

Ref	Items	Index-term
E1	7	AU=RANKI N, RN
E2	2	AU=RANKI N, RN*
E3	0	*AU=RANKI N, ROB?
E4	1	AU=RANKI N, ROBB E.
E5	23	AU=RANKI N, ROBERT
E6	4	AU=RANKI N, ROBERT A.
E7	5	AU=RANKI N, ROBERT A.
E8	1	AU=RANKI N, ROBERT C.
E9	1	AU=RANKI N, ROBERT CARTER
E10	1	AU=RANKI N, ROBERT EDWARD
E11	1	AU=RANKI N, ROBERT JOHN, JR.
E12	8	AU=RANKI N, ROBERT L.

Enter P or PAGE for more

? s e1-e12

7	AU=RANKI N, RN
2	AU=RANKI N, RN*
0	AU=RANKI N, ROB?
1	AU=RANKI N, ROBB E.
23	AU=RANKI N, ROBERT
4	AU=RANKI N, ROBERT A.
5	AU=RANKI N, ROBERT A.
1	AU=RANKI N, ROBERT C.
1	AU=RANKI N, ROBERT CARTER
1	AU=RANKI N, ROBERT EDWARD
1	AU=RANKI N, ROBERT JOHN, JR.
8	AU=RANKI N, ROBERT L.

S17

54 E1-E12

? rd

&gt;&gt;&gt;Duplicate detection is not supported for File 393.

&gt;&gt;&gt;Duplicate detection is not supported for File 391.

&gt;&gt;&gt;Records from unsupported files will be retained in the RD set.

S18 46 RD (unique items)

? s s18 and phosphodiester

46	S18
37178	PHOSPHODIESTER
1	S18 AND PHOSPHODIESTER

S19

? rd

&gt;&gt;&gt;Duplicate detection is not supported for File 393.

&gt;&gt;&gt;Duplicate detection is not supported for File 391.

&gt;&gt;&gt;Records from unsupported files will be retained in the RD set.

S20 1 RD (unique items)

? t s20/3,k/1

&gt;&gt;&gt;KW C option is not available in file(s): 399

20/3,K/1 (Item 1 from file: 399)

DI ALCO (R) File 399: CA SEARCH (R)

(c) 2009 American Chemical Society. All rts. reserv.

140230578 CA: 140(15)230578h PATENT  
 Sequences of immunostimulatory oligonucleotides and therapeutic use for  
 immune related diseases  
 INVENTOR(AUTHOR): Krieg, Arthur M.; Samulowitz, Urike; Vollmer, Joerg;  
 Uhlmann, Eugen; Jurk, Marion; Lipford, Grayson; Rankin, Robert  
 LOCATION: USA  
 ASSIGNEE: Coley Pharmaceutical Group, Inc.; Coley Pharmaceutical GrbH

10644052cpgA.txt  
 PATENT: PCT International ; WO 200416805 A2 DATE: 20040226  
 APPLI CATION: WO 2003US25935 (20030819) \*US PV404479 (20020819) \*US  
 PV404820 (20020819) \*US PV429701 (20021127) \*US PV447377 (20030214)  
 PAGES: 276 pp. CODEN: PI XXD2 LANGUAGE: English  
 PATENT CLASSIFICATION:  
 CLASS: C12Q 000/ A  
 DESIGNATED COUNTRIES: AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG; BR; BY; BZ;  
 CA; CH; CN; CO; CR; CU; CZ; DE; DK; DM; DZ; EC; EE; ES; FI; GB; GD; GE; GH;  
 GM; GR; HU; ID; IL; IN; IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR; LS; LT; LU;  
 LV; MA; MD; MG; MK; MN; MW; MX; NZ; NI; NO; NZ; OM; PG; PH; PL; PT; RO; RU;  
 SC; SD; SE; SG; SK; SL; SY; TJ; TM; TN; TR; TT; TZ; UA; UG; UZ; VC; VN; YU;  
 ZA; ZW AM; AZ; BY; KG; KZ; MD; RU; TJ; TM DESIGNATED REGIONAL: GH; GM; KE;  
 LS; MW; MZ; SD; SL; SZ; TZ; UG; ZM; ZW AT; BE; BG; CH; CY; CZ; DE; DK;  
 EE; ES; FI; FR; GB; GR; HU; IE; IT; LU; MC; NL; PT; RO; SE; SI; SK; TR; BF;

Set Items Description

? e au=krieg, a?

Ref	Items	Index-term
E1	5	AU=KRI EG A. H.
E2	7	AU=KRI EG A. M.
E3	0	*AU=KRI EG A?
E4	5	AU=KRI EG ADAM J.
E5	11	AU=KRI EG ADAM J.
E6	2	AU=KRI EG ADAM JEREMY
E7	1	AU=KRI EG ADRI AN
E8	2	AU=KRI EG ADRI AN H
E9	2	AU=KRI EG AF
E10	3	AU=KRI EG AH
E11	1	AU=KRI EG AJ
E12	18	AU=KRI EG ALEXANDER

Enter P or PAGE for more

? s e2

S1 7 AU= KRI EG A. M'

? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S2 5 RD (unique items)

? t s2/3, k/1-5

>>>KWC option is not available in file(s): 399

2/3, K/1 (Item 1 from file: 103)

DI ALCO R) File 103: ENERGY SCI TEC

(c) 2010 CONTAINS COPYRIGHTED MATERIAL. All rts. reserv.

07772558 CSTI; SCA 550400; 550900; 550700; 550300; PA- EDB-96-040383; SN  
 96001541589; TVI 96008

Title: QoG DNA: A pathogenic factor in systemic lupus erythematosus?

Author(s): Krieg, A. M. [Univ. of Iowa College of Medicine, Iowa  
 City, IA (United States)]

Journal Name: Journal of Clinical Immunology

Source: Journal Name: Journal of Clinical Immunology; Journal Volume: 15;

Journal Issue: 6; Other Information: PBD: Nov 1995 ISSN: 0271-9142

Publication Date: 19951101

Availability Date: 20091216

CSTI Number(s): CSTI ID 182167

Contract Number (Non-DOE): Journal ID JCI MDQ; Other CNN Grant



R29-AR42556-01; TRN TRN 96000734-0001

Language: English

Medium Dimensions: Medium X; Size: pp. 284-292

Author(s): Krieg, A. M. [Univ. of Iowa College of Medicine, Iowa City, IA (United States)]

2/3, K/2 (Item 2 from file: 103)

DI/ALCO/R File 103: ENERGY SCI TEC

(c) 2010 CONTAINS COPYRIGHTED MATERIAL. All rights reserved.

07552420 NLM NLM 91-01863; EDB-91-095904

Title: Association of murine lupus and thymic full-length endogenous retroviral expression maps to a bone marrow stem cell

Author(s): Krieg, A. M.; Gourley, M. F.; Steinberg, A. D. (National Institutes of Health, Bethesda, MD (USA))

Sponsoring Organization: Not Available

Journal Name: Journal of Immunology

Source: Journal Name: Journal of Immunology; (USA); Journal Volume: 146:9

Codens: JCI MA ISSN: 0022-1767

Publication Date: 19910501

Availability Date: 20091216

OSTI Number(s): OSTI ID 5760970

Contract Number (DOE): None

Language: English

Medium Dimensions: Medium X; Size: Pages: 3002-5

Author(s): Krieg, A. M..

2/3, K/3 (Item 1 from file: 8)

DI/ALCO/R File 8: Ei Compendex(R)

(c) 2010 Elsevier Eng. Info. Inc. All rights reserved.

1209947422 E.I. COMPENDEX No: 20091111956701

Immunotherapeutic applications of CpG oligodeoxynucleotide TLR9 agonists

Volmer, Jorg; Krieg, Arthur M

Corresp. Author/Affil: Krieg, A. M.: Pfizer Inc., 620 Memorial

Drive, Cambridge, MA 02139, United States

Corresp. Author email: arthur.krieg@pfizer.com

Advanced Drug Delivery Reviews (Adv. Drug Deliv. Rev.) (Netherlands)

2009, 61/3 (195-204)

Publication Date: 20090328

Publisher: Elsevier

CODEN: ADDRE ISSN: 0169-409X

Publisher Item Identifier: S0169409X09000039

DOI: 10.1016/j.addr.2008.12.008

Document Type: Review; Journal Record Type: Abstract

Language: English Summary Language: English

Number of References: 205

Corresp. Author/Affil: Krieg, A. M.: Pfizer Inc., 620 Memorial Drive, Cambridge, MA 02139, United States

2/3, K/4 (Item 2 from file: 8)

DI/ALCO/R File 8: Ei Compendex(R)

(c) 2010 Elsevier Eng. Info. Inc. All rights reserved.

0017639259 E.I. COMPENDEX No: 20071110490747

Toll-free vaccines?

Krieg, Arthur M

10644052cpgA.txt

Corresp. Author/Affil: Krieg, A.M.: Coley Pharmaceutical Group,  
Inc., 93 Worcester Street, Wellesley, MA 02481, United States  
Corresp. Author email: akrieg@coleypharma.com  
Nature Biotechnology ( Nat. Biotechnol. ) (United States) 2007, 25/3  
(303-305)

Publication Date: 20070321  
Publisher: Nature Publishing Group  
CODEN: NABI F ISSN: 1087-0156 eISSN: 1546-1696  
Publisher Item Identifier: NBT0307303  
DOI: 10.1038/nbt0307-303  
Document Type: Short Survey; Journal Record Type: Abstract  
Treatment: T; (Theoretical)  
Language: English Summary Language: English  
Number of References: 11

Corresp. Author/Affil: Krieg, A.M.: Coley Pharmaceutical Group,  
Inc., 93 Worcester Street, Wellesley, MA 02481, United States

2/3,K/5 (Item 1 from file: 149)  
DI ALCO R File 149: TGG Health&Wellness DB(SM)  
(c) 2010 Gale/Cengage. All rts. reserv.

03942337 SUPPLIER NUMBER: 190749591  
Toll-like receptor 9 (TLR9) agonists in the treatment of cancer.(Clinical  
report)

Krieg, A.M.  
Oncogene, 27, 2, 161(7)  
Jan 7,  
2008

DOCUMENT TYPE: Clinical report PUBLICATION FORMAT: Magazine/Journal  
ISSN: 0950-9232 LANGUAGE: English RECORD TYPE: Citation  
TARGET AUDIENCE: Academic

Krieg, A.M.  
? e au=krieg, a?

Ref	Items	Index-term
E1	5	AU=KRI EG A. H.
E2	7	AU=KRI EG A. M.
E3	0	*AU=KRI EG A?
E4	5	AU=KRI EG ADAM J.
E5	11	AU=KRI EG ADAM J.
E6	2	AU=KRI EG ADAM J.EREMY
E7	1	AU=KRI EG ADRI AN
E8	2	AU=KRI EG ADRI AN H.
E9	2	AU=KRI EG AF
E10	3	AU=KRI EG AH
E11	1	AU=KRI EG AJ
E12	18	AU=KRI EG ALEXANDER

Enter P or PAGE for more

? page

Ref	Items	Index-term
E13	1	AU=KRI EG ALEXYS R.
E14	1	AU=KRI EG ALEXYS R.
E15	1	AU=KRI EG ALOYS
E16	7	AU=KRI EG ALOYSI US
E17	143	AU=KRI EG AM
E18	15	AU=KRI EG AM
E19	25	AU=KRI EG ANDREAS
E20	1	AU=KRI EG ANDREAS H.

```

E21      1 AU=KRI EG ANJA
E22      1 AU=KRI EG ARI BERT
E23      7 AU=KRI EG ARTHUR
E24      1 AU=KRI EG ARTHUR F

```

Enter P or PAGE for more

```

? s e23-24
>>>Term "24" in invalid position
? s e23-e24

```

```

      7 AU=KRI EG ARTHUR
      1 AU=KRI EG ARTHUR F
S3      8 E23- E24

```

? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

```

      S4      8 RD (unique items)
? s s4 and tcgtcgTTTTgtcgTTTTtcga
      8 S4
      2 TCGTCGTTTTGTCGTTTTTTTGA
      S5      0 S4 AND TCGTCGTTTTGTCGTTTTTTTGA
? e au=krieg, arthur

```

Ref	Items	Index-term
E1	1	AU=KRI EG ANJA
E2	1	AU=KRI EG ARI BERT
E3	7	*AU=KRI EG ARTHUR
E4	1	AU=KRI EG ARTHUR F
E5	11	AU=KRI EG ARTHUR F.
E6	67	AU=KRI EG ARTHUR M
E7	253	AU=KRI EG ARTHUR M
E8	2	AU=KRI EG B
E9	256	AU=KRI EG B.
E10	4	AU=KRI EG B. L.
E11	8	AU=KRI EG B. L.
E12	1	AU=KRI EG B. L. (PACIFIC GAS AND ELECTRIC CO., SAN

Enter P or PAGE for more

```

? s e4-e7
      1 AU=KRI EG ARTHUR F
      11 AU=KRI EG ARTHUR F.
      67 AU=KRI EG ARTHUR M
      253 AU=KRI EG ARTHUR M
S6      332 E4- E7
? s s6 and (tcgtcgTTTTgtcgTTTTtcga)
      332 S6
      2 TCGTCGTTTTGTCGTTTTTTTGA
      S7      0 S6 AND (TCGTCGTTTTGTCGTTTTTTTGA)
? s s6 and (?tcgtcgTTTTgtcgTTTTtcga?)
Processed 10 of 50 files ...
Processed 20 of 50 files ...
Processed 30 of 50 files ...
Processed 40 of 50 files ...
Processed 50 of 50 files ...
Completed processing all files
      332 S6
      0 ?TCGTCGTTTTGTCGTTTTTTTGA?
      S8      0 S6 AND (?TCGTCGTTTTGTCGTTTTTTTGA?)
?
? ds

```

Set	Items	Description
S1	7	AU= KRI EG A M'
S2	5	RD (unique items)
S3	8	E23- E24
S4	8	RD (unique items)
S5	0	S4 AND TOGTOGTTTTGTOGTTTTTTTGOA
S6	332	E4- E7
S7	0	S6 AND (TOGTOGTTTTGTOGTTTTTTTGOA)
S8	0	S6 AND (?TOGTOGTTTTGTOGTTTTTTTGOA?)

? ds

Set	Items	Description
S1	7	AU= KRI EG A M'
S2	5	RD (unique items)
S3	8	E23- E24
S4	8	RD (unique items)
S5	0	S4 AND TOGTOGTTTTGTOGTTTTTTTGOA
S6	332	E4- E7
S7	0	S6 AND (TOGTOGTTTTGTOGTTTTTTTGOA)
S8	0	S6 AND (?TOGTOGTTTTGTOGTTTTTTTGOA?)

? s TOGTOGTTTTGTOGTTTTTTTGOA

S9	2	TOGTOGTTTTGTOGTTTTTTTGOA
----	---	--------------------------

? s TOGTOGTTTTGTOGTTTTTTTGOA

S10	2	TOGTOGTTTTGTOGTTTTTTTGOA
-----	---	--------------------------

? rd

>>>Duplicate detection is not supported for File 393.

>>>Duplicate detection is not supported for File 391.

>>>Records from unsupported files will be retained in the RD set.

S11 2 RD (unique items)

? t s11/3, k/1-2

>>>KW C option is not available in file(s): 399

11/3, K/1 (Item 1 from file: 357)

DI ALCO (R) File 357: Derwent Biotech Res.  
(c) 2010 Thomson Reuters. All rts. reserv.

0354257 DBR Accession No.: 2004-26549 PATENT

Identifying agonists of Toll-like receptor (TLR) signaling activity, useful therapeutically or prophylactically, comprises contacting an RPM 8226 cell that expresses a TLR with a test compound and measuring TLR signaling activity - toll-like receptor and antagonist and agonist for use in disease therapy

AUTHOR: VOLLMEYER J; JURK M; LIPFORD G B; SCHETTER C; FORSBACH A; KRIEG A M

PATENT ASSIGNEE: COLEY PHARM GMBH; COLEY PHARM GROUP INC 2004

PATENT NUMBER: WO 2004/94671 PATENT DATE: 20041104 WPI ACCESSION NO.: 2004-795573 (200478)

PRIORITY APPLIC. NO.: US 464588 APPLIC. DATE: 20030422

NATIONAL APPLIC. NO.: WO 2004/US12788 APPLIC. DATE: 20040422

LANGUAGE: English

... ABSTRACT: base sequence TOGTOGTTTTGTOGTTTTGTOGTT (SEQ ID NO: 1),  
5'-TCGTOGTTTTGACGTTTTGTOGTT-3' (SEQ ID NO: 139), 5'-  
TOGTOGTTTTGTOGTTTTTTTGOA-3' (SEQ ID NO: 140),  
5'-TCGTOGTTTGTGTOGTTTGTGTOGTT-3' (SEQ ID NO: 141), 5'-TOGTOGTTTGTGTOGTTTTG  
TOGTT-3'...

11/3, K/2 (Item 2 from file: 357)

DI ALCO (R) File 357: Derwent Biotech Res.  
(c) 2010 Thomson Reuters. All rts. reserv.

0351655 DBR Accession No.: 2004-23947 PATENT  
Inducing immune response in subject useful for preventing and/or treating  
viral infection e.g., human papilloma virus infection, involves  
topically administering oil-in-water emulsion and immunostimulatory  
nucleic acid, to subject - CpG immunostimulant oligonucleotide transfer  
and expression in host cell for nucleic acid vaccine and gene therapy

AUTHOR: DAVIS H L; MOULSKI E M J

PATENT ASSIGNEE: COLEY PHARM GROUP LTD 2004

PATENT NUMBER: WO 200487203 PATENT DATE: 20041014 WPI ACCESSION NO.:

2004-737575 (200472)

PRIORITY APPLIC. NO.: US 461903 APPLIC. DATE: 20030410

NATIONAL APPLIC. NO.: WO 2004181371 APPLIC. DATE: 20040401

LANGUAGE: English

...ABSTRACT: has the nucleotide sequence of 5'-tcgtctttttgcgttttgcgtt-3',  
5'-tcgtcgttttcgtcgttttcgtcgtt-3', 5'-tcgtcgttttcggtcgtttt-3', 5'-  
tcgtcgtttttgcgttttttcga-3', 5'-tcgtcgttttcgtgcgtttt-3', or  
5'-tcgtcgtttgcgttttgcgtt-3'. The immunostimulatory nucleic acid is a  
class...

? ds

Set	Items	Description
S1	7	AU= KRI EQ. A. M.
S2	5	RD (unique items)
S3	8	E23- E24
S4	8	RD (unique items)
S5	0	S4 AND TCGTCGTTTTGTCGTTTTTTTTCGA
S6	332	E4- E7
S7	0	S6 AND (TCGTCGTTTTGTCGTTTTTTTTCGA)
S8	0	S6 AND (?TCGTCGTTTTGTCGTTTTTTTTCGA?)
S9	2	TCGTCGTTTTGTCGTTTTTTTTCGA
S10	2	TCGTCGTTTTGTCGTTTTTTTTCGA
S11	2	RD (unique items)

BJ; CF; CG; CI; CM; GA; GN; GQ; GW; ML; MR; NE; SN; TD; TG